



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

MASSARA, A. et al.

Atty. Ref.: 2490-17

Serial No. 10/070,619

Group: 2881 ✓

Filed: March 8, 2002

Examiner: Unassigned

For: SEMICONDUCTOR LASER DIODE WITH A DISTRIBUTED  
REFLECTOR

\* \* \* \* \*

August 19, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT**

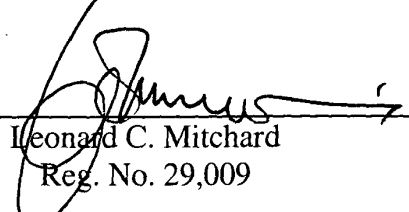
Attached is a completed Form PTO-1449 listing references in connection with this application. Also enclosed is a copy of each of those references, along with the Search Report which issued on the corresponding British Application No. 9921445.4.

The Examiner is requested to initial the attached PTO-1449, and to return a copy of the initialed document to the undersigned as an indication that the listed references have been considered and made of record.

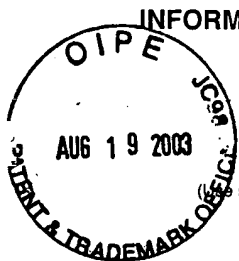
Respectfully submitted,

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**INFORMATION DISCLOSURE  
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(Use several sheets if necessary)

ATTY. DOCKET NO.

2490-17

APPLICANT

MASSARA, A. et al.

FILING DATE

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SERIAL NO.

10/070,619

GROUP

2881

**U.S. PATENT DOCUMENTS**

| *EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE    | NAME       | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----------------|---------|------------|-------|----------|-------------------------------|
|                      | 4,873,691       | 10/1989 | Uomi et al |       |          |                               |
|                      | 4,856,017       | 08/1989 | Ungar      |       |          |                               |
|                      | 5,982,804       | 11/1999 | Chen et al |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |
|                      |                 |         |            |       |          |                               |

**FOREIGN PATENT DOCUMENTS**

| DOCUMENT     | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION<br>YES NO |
|--------------|---------|---------|-------|----------|-----------------------|
| 2 280 308 A  | 01/1995 | GB      |       |          |                       |
| 0 887 668 A1 | 12/1998 | EP      |       |          |                       |
| 0 402 907 A2 | 12/1990 | EP      |       |          |                       |
| 0 276 071 A2 | 07/1988 | EP      |       |          |                       |
| 0 263 690 A2 | 04/1988 | EP      |       |          |                       |
| 0 125 608 A2 | 11/1984 | EP      |       |          |                       |
|              |         |         |       |          |                       |
|              |         |         |       |          |                       |

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)**

|  |  |
|--|--|
|  | Massara, A.B. et al; "Mode-hop-free, single-mode operation of 2D-lattice distributed reflector laser under 2.5Gb/s modulation"; Electronics Letters, Vol. 36, No. 2, pp. 141-2; 2000.  |
|  | Miller, L.M et al.; "A Distributed Feedback Ridge Waveguide Quantum Well Heterostructure Laser"; IEEE Photonics Technology Letters; Vol. 3, No. 1, pp. 6-8; 1991.  |
|  | Han, H. et al; "Two-Dimensional Rectangular Lattice Distributed Feedback Lasers: A Coupled-Mode Analysis of TE Guided Modes"; IEEE Journal of Quantum Electronics; No. 11; pp. 1947-1954; 1995.  |
|  | Massara, A.B. et al; "10Gb/s Single-Mode Operation of 2D-Lattice Distributed Reflector Laser"; ECOC 2000; Paper 3-3-5; Munich, 2000.   |
|  | Masahiro, I. et al; "Semiconductor Lasers with One-and Two-Dimensional Air/Semiconductor Gratings Embedded by Wafer Fusion Technique"; IEEE Journal of Selected Topics in Quant.; pp. 650-663; XP-000930544.                             |
|  | Bullock, D.L. et al; "Photonic band structure investigation of two-dimensional Bragg reflector mirrors for semiconductor laser mode control"; J. Optical Society of America Am. B.; Vol. 10, No. 2; pp. 399-403; XP 000606814.           |
|  | Watanabe, Y. et al; "Laterally Coupled Strained MQW Ridge Waveguide Distributed-Feedback Laser Diode Fabricated by Wet-Dry Hybrid Etching Process"; IEEE Photonics Technology Letters, Vol. 10, No. 12, 1998; pp. 688-690; XP-000802155. |
|  | Toshihiko, M.; "Semiconductor Laser Element"; Patent Abstracts of Japan; 02143581; 01/06/90.   |
|  | Kiyobumi, C.; "Non-Regrowth Distribution Feedback Ridge Type Semiconductor Laser and its Manufacture"; Patent Abstracts of Japan; 10098235; 04/14/98.  |
|  |  |

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.